

**Before the  
FEDERAL COMMUNICATIONS COMMISSION  
Washington, D.C. 20554**

In the Matter of

Implementing a Nationwide, Broadband	)	
Interoperable Public Safety Network in the	)	PS Docket No. 06-229
700 MHz Band	)	
Petition by the City of San Antonio, Texas	)	
For Waiver of the Commission's Rules to Deploy	)	
a 700 MHz Public Safety Interoperable	)	
Broadband Network	)	

**COMMENTS OF THE CITY OF  
SAN ANTONIO, TEXAS**

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In the Matter of

Implementing a Nationwide, Broadband Interoperable Public Safety Network in the 700 MHz Band	) ) )	PS Docket No. 06-229
Petition by the City of San Antonio, Texas For Waiver of the Commission's Rules to Deploy a 700 MHz Public Safety Interoperable Broadband Network	) ) ) )	

**COMMENTS OF THE CITY OF  
SAN ANTONIO, TEXAS**

The City of San Antonio, Texas ("San Antonio"), on behalf of the San Antonio Urban Area Security Initiative Program ("SA-UASI Region"), files these comments in response to the Commission's Public Notice, DA 09-1819, released August 14, 2009 ("Public Notice"), seeking comment on the petitions for waiver filed by San Antonio ("San Antonio Petition") and twelve other parties seeking authority to deploy public safety systems on a local or regional basis in the 10 MHz of the 700 MHz public safety broadband spectrum currently licensed to the Public Safety Spectrum Trust ("PSST").

**INTRODUCTION AND SUMMARY**

San Antonio applauds the Commission for issuing the Public Notice, and for recognizing the potential advancement toward the goal of deploying a national, interoperable public safety network that the San Antonio Petition, and most of the other waiver petitions represent. San Antonio also appreciates the support that PSST and APCO have given to the waiver requests,

and generally supports most of the conditions that PSST and APCO believe should be attached to grant of the waivers.<sup>1</sup>

San Antonio believes that the Commission can, and should, grant its waiver petition and those similar petitions of other local, regional and state government entities. Deployment of the much-needed, but unfortunately much-delayed, national interoperable public safety network must start somewhere, and the Commission should view the waiver petitions as a valuable opportunity to jump-start that deployment. San Antonio and other waiver petitioners are ready and willing to move forward now, and to accept appropriate conditions on the waiver that are necessary to ensure that the early segments of the national network that they will build out will be interoperable, and technically and functionally compatible, with the national network.

**I. Granting the Waiver Petitions Would Promote the Commission's Policy Goals for a Nationwide, Inoperable Public Safety Network.**

In considering the waivers, the FCC's primary policy goal should be to fashion a process that will facilitate the early buildout of the national public safety network by local, regional and state entities that desire to construct their portion of the network with their public funds, through a public-private partnership, or through a combination of the two. That is the only way in the near term that a national interoperable public safety network can begin to get off the ground.

To accomplish this goal, the Commission should establish a framework whereby the PSST is authorized to allow buildout of segments of the national 700 MHz network by local, regional and state entities on a long-term, *de facto* transfer, spectrum lease basis pursuant to basic technical and interoperability guidelines established by the Commission. The details of these lease arrangements should be left to good faith negotiations between the PSST and the

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<sup>1</sup> Letter from Harlin R. McEwen, PSST, to Acting Chairman Michael J. Copps, PS Docket No. 06-229 (filed May 7, 2009); Comments of APCO on Petitions for Waiver to Deploy 700 MHz Broadband Networks, PS Docket No. 09-229 (filed Sept. 22, 2009) ("APCO Comments").

waiver-recipient lessees, subject to final FCC approval of the lease. The primary objective of the lease should be that the early buildout will be fully interoperable with the national broadband public safety network, including capability for roaming.

Grant of the waivers will allow deployment of the national broadband network to commence in the most expeditious fashion possible. In fact, it is the *only* way that deployment will even begin in the reasonably foreseeable future. At present, there is no D-Block auction winner, nor any immediate possibility of a D-Block winner, and the PSST has no funding to build out the network. Waiver applicants like San Antonio, on the other hand, stand ready to commit to begin buildout in their areas as soon as possible, and also have access to funding to pay for their systems' construction. Accordingly, their waiver requests should be granted so that the areas covered by their requests can promptly proceed with construction. Moreover, permitting early deployment of 700 MHz public safety networks via the requested waivers will almost certainly speed deployment of the nationwide system, as it will help set standards and serve to "pull" the rest of the nation along that path.

The nationwide network will of course ultimately be operated as a single coordinated network. But building that network upon a foundation of the state, regional and local networks proposed by the waiver requests, resulting in a "network of networks" approach, is perfectly consistent with that goal, and indeed, the only way to reach that goal in any expeditious manner. Early builders will be constructing and deploying local or regional portions of the nationwide network. To facilitate the process, if necessary, waiver recipients' lease arrangements with the PSST could require the lessee to obtain funding for its buildout within a reasonable time after the lease is executed.

## II. Specific Responses to the Public Notice, Appendix A Questions.

1. Timing. The Commission should address and act on the pending waiver petitions promptly and not await completion of the pending rulemaking. Early builders deploying under the waivers should be grandfathered, but they would be subject to technical and interoperability requirements ultimately adopted for the national public safety broadband system to ensure interoperability and compatibility with each other and with the national network. Any D-Block auction bidder would bid based on the understanding that a preexisting waiver recipient/PSST lessee has priority in the designated waiver service area. A waiver condition could be imposed requiring the waiver recipient/PSST lessee to engage in good faith negotiations with the PSST and D-Block auction winner for the coordination of operations.

2. Authority to Operate. Grant of authority to the waiver applicants to build and operate on the 700 MHz public safety broadband spectrum should be accomplished by spectrum lease arrangement between the licensee, PSST, and the waiver recipient. A waiver should be granted to allow the PSST to enter into lease arrangements with waiver applicants. The lease agreement between PSST and the waiver recipient should specify the technical standards and other terms of the waiver applicant's operations. San Antonio agrees with, and would be willing to accept, the proposed term sheet set forth on pages 27-31 of the NPSTC's *700 MHz Public Safety Broadband Task Force Report and Recommendations*, at 27-31 (Sept. 4, 2009), available at [http://www.npstc.org/documents/700\\_MHz\\_BBTF\\_Final\\_Report\\_0090904\\_v1\\_1.pdf#search='task force report'](http://www.npstc.org/documents/700_MHz_BBTF_Final_Report_0090904_v1_1.pdf#search='task force report').

3. Existing Early Buildout Rules. San Antonio believes that the existing early buildout rules should not apply to waiver recipients because there is no D-Block auction winner. Waiver recipients should be permitted to negotiate an individual buildout schedule with the PSST in their specific lease agreement, which would then be subject to FCC approval. Any

D-Block auction winner would take subject to that arrangement. Early-building waiver recipients would be constructing a portion of the national network with the understanding, under the terms of the lease with PSST, that the early builder's portion of the network would be compatible with the eventually-to-be-constructed national network. As the national network proceeds with construction, with or without a D-Block auction winner, there should be mechanisms in place to facilitate discussions and cooperation among all of the parties (the PSST, commercial partners, waiver recipient network builders) to ensure the cohesiveness of the national network. One way this could be accomplished is through the establishment of an advisory committee of early builders to work with the PSST.

4. Narrowband Operations. San Antonio believes that the options set forth in the APCO comments (at 7-8) appear reasonable where there are preexisting narrowband operations within a waiver applicant's territory.

5. Sufficiency of Pleading. San Antonio takes this opportunity to provide additional information in support of its waiver petition. The City of San Antonio and Bexar County have deployed a regional Public Safety Radio System that supports forty one (41) public safety agencies. The radio system provides a robust public safety grade infrastructure to support radio and data communications to include radio system infrastructure and an OC-48 SONET ring connecting the radio towers to the City's redundant data centers with additional capacity to support wireless data services at the radio towers.

San Antonio plans to upgrade its existing Enhanced Digital Access Communications System (EDACS) radio system with a Voice, Interoperability, Data and Access (VIDA) switch. The VIDA upgrade will establish a network that supports multiple platforms on a secure and scalable IP backbone. This will integrate P25 700 MHz and VHF layers with the existing

EDACS radio system. This interoperable solution is a spectrally efficient TDMA system that permits multiple transmissions.

San Antonio proposes to utilize the 700 MHz D Block to deploy an OpenSky system that would provide mobile data support to public safety first responders in the San Antonio region. The OpenSky system would leverage the City's investment in the VIDA switch and integrate the mobile data from OpenSky with the existing 800 MHz EDACS radio system as well as the P25 700 MHz and VHF systems. In addition, San Antonio has already deployed 600 out of a planned 1,300 802.11 Wireless (Wi-Fi) Mesh Access Points at traffic signals over a 400-square mile area of the City to support traffic operations and public safety requirements. The City would use the OpenSky system in conjunction with the Wi-Fi Mesh to develop and deploy broadband mobile applications as a transition to LTE. When LTE standards are finalized LTE system equipment is commercially available, San Antonio would upgrade and replace the OpenSky system with a robust broadband LTE system to support regional public safety agencies.

San Antonio would implement this plan in three phases:

*Phase I* – The City will procure and deploy a VIDA switch to support radio interoperability and the deployment of the OpenSky system. The timeframe to install and configure the VIDA switch and provide radio interoperability between the 800 MHz EDACS system and the P25 700 MHz and VHF system should be completed by September 2010. Existing funds have been budgeted in the current fiscal year to pay for this upgrade.

*Phase II* – If the City's waiver petition is granted, the City would procure and deploy an OpenSky 700 MHz system to support the integration of mobile data services with the existing radio system. The initial deployment would focus on approximately

100 square miles within the inner City loop. The timeframe to install and configure the OpenSky system should be completed by September 2011. The City has adequate funds in its Fiscal Year 2011 budget to pay for this deployment.

*Phase III* – If the City’s waiver petition is granted and pending the commercial availability of an LTE system, the City would evaluate, procure, and deploy a 700 MHz LTE system to provide coverage for the entire SA-UASI Region with a planned 95% coverage for the 1,120-square mile Bexar County region. The City estimates that it will take at least three years to complete this deployment, with the deployment beginning in Fiscal Year 2012 and finishing in Fiscal Year 2015. The City has adequate funds to begin the deployment in Fiscal Year 2012 for the initial 100-square mile inner loop and may pursue issuing additional bonds to fund completion of the deployment throughout the 1,120-square mile area of Bexar County.

San Antonio is pleased to provide this additional information in support of its waiver petition, but would suggest that the Commission not get unduly involved in micro-analyzing the sufficiency of each waiver applicant’s funding availability, or technical proposals, as part of the waiver granting process. The PSST is much better positioned to address these individualized issues in negotiating the lease agreement. As a condition of the lease, PSST likely would, and should be able to, impose certain fundamental requirements the lessee, including the meeting of funding and buildout milestones as negotiated and specified in the lease. If the PSST and the waiver recipient cannot agree on those terms, disputes could be resolved by the Commission.

6. Interoperability. San Antonio fully supports interoperability. While we recognize that commercially available LTE standards have not been finalized, San Antonio intends to build out its system in a way that will be sufficiently flexible to meet those standards, and is willing to

commit to paying the costs necessary to make its system interoperable with whatever LTE standards are ultimately adopted. As a waiver applicant, San Antonio understands that its system will be a local/regional portion of what will become a national public safety network. The NPSTC's efforts to define the interoperability requirements were undertaken at the behest of the PSST, and we fully support those efforts and recommendations. Ultimately, the PSST lease agreement should define the interoperability requirements, and these requirements are best left to that forum. A PSST advisory group should be formed, made up of the waiver recipients, to work with the PSST to ensure interoperability.

7. Mutually Exclusive Waivers. Overlapping systems should be required to coordinate with each other; again, each waiver recipient is building a portion of the national system. The issue can perhaps best be sorted out by the PSST through the lease negotiation process. This approach also could avoid the *Ashbacker* problem of mutually exclusive applications requiring a hearing.<sup>2</sup>

8. Enforcement. Enforcement should be handled, in the first instance, through the spectrum lease process. Deployments need to be monitored carefully. Certainly some terms and conditions should be common to all PSST spectrum leases, but not all waiver applicants are similarly situated. The needs and requirements in San Antonio may well be somewhat different from those in, say, Boston or Iowa. Flexibility in lease terms should be allowed to accommodate these different needs and requirements. By allowing these matters to be handled by the PSST through the spectrum lease process, the needed flexibility can be provided in the early deployment of local portions of the national network while assuring that the concerns of the national licensee, the PSST, are addressed. Where disputes do arise between the PSST and a spectrum lessee, the FCC should, of course, resolve them.

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<sup>2</sup> *Ashbacker Radio Corp. v. FCC*, 326 U.S. 327 (1945).

9. Permissible Users. The contemplated primary eligible users of the planned SA-UASI Region 700 MHz network would be law enforcement, fire, public safety and emergency management agencies, departments or personnel of participating municipalities, school districts, colleges, and federal and state government within the region. We believe use of the system by these agencies, departments and personnel falls within the “public safety services” definition of 47 U.S.C. § 337(f)(1). That section can, and should, be construed to include those personnel of state or local government institutions or political subdivisions, like school districts and colleges, whose responsibility it is “to protect the safety of life, health, or property” at those institutions. 47 U.S.C. § 337(f)(1)(A) & (B)(ii). Any other reading would create an intolerable “hole” in the national public safety network’s ability to protect the safety of students, other school or college personnel, and school or college property, based on nothing more than how a particular state or locality happens to organize its subdivisions and departments.<sup>3</sup> Surely the Commission need not be reminded of recent serious security incidents at colleges and public schools to appreciate the unacceptability of such a crabbed reading of Section 337(f)(1).

With respect to use of the 700 MHz public safety broadband spectrum by the private partner of a public-private partnership (for those waiver applicants that choose to go that route), the Commission made clear in the *700 MHz Second Report and Order* that non-public safety users could (and should) be allowed access to the public safety 700 MHz Broadband spectrum on a *secondary preemptible* basis.<sup>4</sup> The Commission found this to be necessary in order to facilitate creation of a public-private partnership pursuant to which the private partner would provide funding to build out a national public safety 700 MHz broadband network. The Commission

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<sup>3</sup> See *Implementing a Nationwide, Broadband, Interoperable Public Safety Network in the 700 MHz Band*, Third Further Notice of Proposed Rulemaking, 23 FCC Rcd 14301, 14404-14406 (2008).

<sup>4</sup> *Implementing a Nationwide, Broadband, Interoperable Public Safety Network*, Second Report and Order, 22 FCC Rcd 15289, 15438 (¶ 419) (2007) (“*700 MHz Second Report and Order*”).

found specifically that such secondary preemptible commercial use in the context of a public-private partnership is consistent with Section 337. The same should be true for waiver applicants that follow the public-private partnership approach at the local or regional level. Some early builders deploying their systems pursuant to waiver may seek to fund their system buildout at least in part by means of a public-private partnership under which the private partner contributes funding to assist in constructing the system. In such circumstances, secondary preemptible use by non-public safety users of the system should be allowed in accordance with the provisions of the *700 MHz Second Report and Order*.

10. Flow Mobile. Neither Flow Mobile nor any other commercial entity should be allowed to obtain a sublicense or lease on the 700 MHz public safety broadband spectrum. Commercial entities should instead be encouraged to work as part of a public-private partnership with waiver-recipient state or local government bodies to assist in buildout of any waiver recipient's system, and in such circumstances should be allowed access to the spectrum on a secondary, preemptible basis as provided for in the existing rules.

**CONCLUSION**

The Commission should grant the San Antonio Petition, and those similar to it, and give the PSST authority to enter into spectrum lease agreements, subject to appropriate conditions set forth in the lease agreement between the waiver recipient and the PSST.

Respectfully submitted,



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